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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|-------------------------------|------------------|
| 10/603,441 | 06/25/2003 | Daniel P. Becker | 01136/1/US (6794-000057/U) | 4396 |
| 28997 | 7590 | 09/24/2004 | EXAMINER | |
| HARNESS, DICKEY, & PIERCE, P.L.C 7700 BONHOMME, STE 400 ST. LOUIS, MO 63105 | | | CHANG, CELIA C | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 1625 | |

DATE MAILED: 09/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/603,441 | BECKER ET AL. | |
| | Examiner | Art Unit | |
| | Celia Chang | 1625 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 25 June 2003.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-226 is/are pending in the application.
 - 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) _____ is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) 1-226 are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| <ol style="list-style-type: none"> 1)<input checked="" type="checkbox"/> Notice of References Cited (PTO-892) 2)<input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) 3)<input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____. | <ol style="list-style-type: none"> 4)<input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____. 5)<input type="checkbox"/> Notice of Informal Patent Application (PTO-152) 6)<input type="checkbox"/> Other: _____. |
|---|---|

DETAILED ACTION

1. Claims 1-226 are in the case.

2.. *Election/Restrictions*

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 62, 112-117, 126-130, 143-144, 204, 208, 212, 214, drawn to A²-A³ is pyran, E²-E⁴ are nonheterocyclic compounds classified in class 549, subclass various, depending on species election. If this group is elected, a further election of a single disclosed species is also required. Generic claims 1-15, 18, 22-23, 31-54, 57-61, 65-111, 118-125, 131-142, 145-203, 205, 207, 209, 211, 215-222, 226 will be prosecuted to the extend of the elected compounds.
- II. Claims 181, 190, 198, 206, 210, drawn to A²-A³ is pyran, E²-E⁴ is 5 membered heterocyclic ring compounds classified in class various, subclass various, depending on species election. If this group is elected, a further election of a single disclosed species is also required. Classification can only be determined upon a species election. Generic claims 1-15, 24-30, 55-56, 63-64, 65-111, 118-125, 131-142, 145-211, 215-222, 226 will be prosecuted to the extend of the elected compounds.
- III. Claims 64, 66, 69, drawn to A²-A³ is pyran, E²-E⁴ is 6 membered heterocyclic ring compounds classified in class various, subclass various, depending on species election. If this group is elected, a further election of a single disclosed species is also required. Classification can only be determined upon a species election. Generic claims 1-15, 24-30, 55-56, 63-64, 65-111, 118-125, 131-142, 145-211, 215-222, 226 will be prosecuted to the extend of the elected compounds.
- IV. Claims 16-17, drawn to A²-A³ is cyclohexyl, classified in class various, subclass various, depending on species election. If this group is elected, a further election of a single disclosed species is also required. Classification can only be determined upon a species election. Generic claims 1-15, 18, 22-23, 31-54, 57-

- 61, 65-111, 118-125, 131-142, 145-203, 205, 207, 209, 211, 215-222, 226 will be prosecuted to the extend of the elected compounds.
- V. Claim 19, drawn to A²-A³ is thiocyclohexyl, classified in class various, subclass various, depending on species election. If this group is elected, a further election of a single disclosed species is also required. Classification can only be determined upon a species election. Generic claims 1-15, 18, 22-23, 31-54, 57-61, 65-111, 118-125, 131-142, 145-203, 205, 207, 209, 211, 215-222, 226 will be prosecuted to the extend of the elected compounds.
- VI. Claims 20-21, 54 in part, drawn to A²-A³ is piperidine, E²-E⁴ are nonheteorcyclic compounds, classified in class 546, subclass various, depending on species election. If this group is elected, a further election of a single disclosed species is also required. Classification can only be determined upon a species election. Generic claims 1-15, 18, 22-23, 31-54, 57-61, 65-111, 118-125, 131-142, 145-203, 205, 207, 209, 211, 215-222, 226 will be prosecuted to the extend of the elected compounds.
- VII. Claims 20-21, 56 in part, drawn to A²-A³ is piperidine, E²-E⁴ is 6 membered heterocyclic ring compounds classified in class various, subclass various, depending on species election. If this group is elected, a further election of a single disclosed species is also required. Classification can only be determined upon a species election. Generic claims 1-15, 24-30, 55-56, 63-64, 65-111, 118-125, 131-142, 145-211, 215-222, 226 will be prosecuted to the extend of the elected compounds.
- VIII. Claims 20-21, 73 in part, drawn to A²-A³ is piperidine, E²-E⁴ is 5 membered heterocyclic ring compounds classified in class various, subclass various, depending on species election. If this group is elected, a further election of a single disclosed species is also required. Classification can only be determined upon a species election. Generic claims 1-15, 24-30, 55-56, 63-64, 65-111, 118-125, 131-142, 145-211, 215-222, 226 will be prosecuted to the extend of the elected compounds.

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- IX. Claims 1-15, 18, 22-30, 31-61, 63-64, 65-111, 118-125, 131-142, 145-203, 205, 207, 209, 211, 215-222, 226 drawn to remaining compounds not covered by groups I-VIII, classified in class various, various, subclass various, depending on species election. If this group is elected, a further election of a single disclosed species is also required. Classification can only be determined upon a species election. Further restriction will be required.
- X. Claims 223-225, drawn to method of treating conditions associated with pathologically excessive matrix metalloprotease activity, TNF- α convertase....etc, classified in class 514, subclass various, depending on species election. If this group is elected, a further election of a single disclosed compound for a single disclosed disease/pathology is also required. Further restriction will be required.

The inventions are distinct, each from the other because:

Groups I-IX are independent and distinct compounds for no common core among the various groups can be identified. Lacking common core, the search for each different core structure is not coextensive as evidenced by the diversity of classification. The compounds of each group also differ in elements, bonding arrangement and chemical property to such an extend as to not being in a general class of compounds recognized in the chemical art.

Inventions I-IX and X are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the process for using the product as claimed can be practiced with another materially different product see US 5,994,312.

The examiner has required restriction between product and process claims. Where applicant elects claims directed to the product, and a product claim is subsequently found allowable, withdrawn process claims that depend from or otherwise include all the limitations of the allowable product claim will be rejoined in accordance with the provisions of MPEP § 821.04. Process claims that depend from or otherwise include all the limitations of the patentable product will be entered as a matter of right if the amendment is presented prior to final rejection or allowance, whichever is earlier. Amendments submitted after final rejection are governed by 37 CFR 1.116; amendments submitted after allowance are governed by 37 CFR 1.312.

In the event of rejoinder, the requirement for restriction between the product claims and the rejoined process claims will be withdrawn and the rejoined process claims will be fully examined for patentability in accordance with 37 CFR 1.104. Thus, to be allowable, the rejoined claims must meet all criteria for patentability including the requirements of 35 U.S.C. 101, 102, 103 and 112. Until an elected product claim is found allowable, an otherwise proper restriction requirement between product claims and process claims may be maintained. Withdrawn process claims that are not commensurate in scope with an allowed product claim will not be rejoined. See "Guidance on Treatment of Product and Process Claims in light of In re Ochiai; In re Brouwer and 35 U.S.C. § 103(b)," 1184 O.G. 86 (March 26, 1996).

Additionally, in order to retain the right to rejoinder in accordance with the above policy, applicant is advised that the process claims should be amended during prosecution either to maintain dependency on the product claims or to otherwise include all the limitations of the product claims. *Applicants are reminded of propriety of process of use claims in consideration of the "reach-through" format, which is drawn to mechanistic, receptor binding or enzymatic functionality. Reach through claims are considered lacking of descriptive and enabling support from the specification. Thus, rejoivable process of use claims are those with particular disease named with efficacy support from the specification for treating the particular disease. Failure to do so may result in a loss of the right to rejoinder.*

Further, note that the prohibition against double patenting rejections of 35 U.S.C. 121 does not apply where the restriction requirement is withdrawn by the examiner before the patent issues. See MPEP § 804.01. Filing of appropriate terminal disclaimer in anticipation of a rejoinder may speed prosecution and the process of rejoinder.

3. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

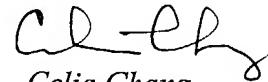
Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Celia Chang whose telephone number is 571-272-0679. The examiner can normally be reached on Monday through Thursday from 8:30 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cecilia Tsang, can be reached on 571-272-0562. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

OACS/Chang


Celia Chang
Primary Examiner
Art Unit 1625